## A PROPOSAL! FOR AN ENVIRONMENTAL WATER BEST MANAGEMENT PRACTICES PROGRAM

Preface: If water supplies dedicated to environmental uses are not managed efficiently, it can directly impact other water users and can also negatively impact environmental programs. Therefore, a BMP program for environmental water uses, parallel to the programs established for urban and agricultural uses, should be a core element of the CALFED Bay-Delta Program. For such a BMP program to be parallel with the programs for urban and agricultural BMP programs, it must be comprehensive and must address all phases of water use for environmental purposes, including but not limited to, diversions for wetlands and wildlife refuges, regulated and unregulated flows for instream purposes (both quantity and quality), and releases from storage for environmental purposes (including temperature control and maintenance of reservoir levels in order to achieve wildlife purposes).

The CALFED Bay-Delta Program for restoring the ecological health of the Bay-Delta system includes improving and increasing both aquatic and terrestrial habitats, such as wetlands, shallow water habitats and spawning areas, riparian woodlands and upland areas to produce food and cover. Such programs will require the CALFED agencies to manage environmental water for the improvement and maintenance of such habitats. It is imperative that environmental water uses be managed so that they are reasonable, produce multiple benefits and do not redirect impacts on other environmental programs or water users. Also, the need for additional water for the environment should undergo a rigorous analysis following the measures outlined in the program described herein.

The program described in this document is voluntary in nature. However, procedures should be established to measure the effectiveness of and to upgrade environmental BMPs to ensure that water dedicated to environmental purposes is being used in an efficient, scientifically justified manner. BMP procedures should require that any additional environmental water requirements first be met from existing allocations of environmental water. Water dedicated to the environment which is not being used efficiently should be redirected to offset other water supply requirements.

<u>Program Description</u>: An environmental best management practices oversight panel shall be established to monitor and recommend changes in environmental

This draft proposal was developed by a number of Central Valley water users in order to stimulate discussion on the issue. It has not been discussed with Roards of Directors.

water uses and methods of use to ensure that any water dedicated to the environment (including instream flows) or otherwise made available to fish and wildlife agencies for environmental uses is efficiently managed to provide the benefits to the environment envisioned by the CALFED program with the least practicable impact on other beneficial uses of water, while maximizing multiple uses of environmental water.

The oversight panel shall consist of biologists, toxicologists, scientists familiar with tidal flows and dynamics, water resources engineers, and other persons experienced in the operation of water projects and the hydrology of the Bay-Delta system. The functions of the oversight panel shall include:

- 1. Preparing, for adoption and implementation by wildlife management authorities, a BMP program as effective as that called for by the AB 3616 MOU or the CVPIA Water Conservation criteria;
- 2. Monitoring the methods of water use in the Central Valley wildlife refuges and recommending water management and conservation measures as appropriate and "net beneficial;"
- 3. Monitoring the timing of wildlife refuse dewatering in the spring to achieve multiple uses;
- 4. Recommending monitoring programs (including real time monitoring) and performance evaluation criteria which will provide data needed to determine if environmental water use practices in the Bay-Delta system can be improved to carry out the policies and purposes of the environmental BMP program;
- 5. Evaluating the results of the monitoring programs and making recommendations to appropriate federal or state regulatory agencies for implementing improved environmental water management strategies developed through the BMP process. Such recommendations could include modifications of terms and conditions of regulatory or statutory water quality, flow, or operational objectives, and modifications to federal AFRP or ESA requirements, to match the actual needs as established through the BMP process;
- 6. Evaluating whether physical improvements to the Bay-Delta system and its habitat would allow environmental water to be managed more efficiently;

7. Identifying and evaluating opportunities to make multiple use of environmental water, thereby providing for multiple environmental purposes and/or for human use.

In evaluating environmental BMPs, the oversight panel shall be guided by the following:

- 1. Environmental water requirements should be developed with a focus on the Bay-Delta system as a whole. Flow or operational requirements for individual species should not be established in a vacuum, but should always be set after consultations among the fish and wildlife agencies that consider how those requirements would affect other species and how a particular block of water could be used to benefit multiple species.
- 2. Environmental water should be used in a manner that promotes multiple beneficial uses. For example, efforts should be made to time deliveries of refuge water so that the flow can be used for other purposes before it is pumped or returned to rivers at critical outflow times to assist with meeting outflow requirements.
- 3. Adaptive management should guide environmental water use decisions. Real time monitoring contributes to adaptive management and should be part of environmental water programs. Adaptive management infers that environmental water uses, and associated methods of use, may change over time as scientific understanding and/or operational experience improves, or as technological advances are made.
- 4. Water for environmental purposes should only be made available to wildlife agencies when there is a high level of certainty that factors other than instream flows are not acting to substantially reduce the environmental benefits of that water.
- 5. Opportunities for wildlife habitat enhancement by wildlife agencies should focus on giving priority to areas that do not overlie a saline water body. This BMP contributes to the concept of multiple uses.
- 6. Water for environmental purposes that is lost to further beneficial use because of flowing to a saline water body should be given a higher level of scrutiny and analysis as to its benefits.
- 7. CALFED agencies (primarily state and federal wildlife agencies), along with other entities which are responsible for environmental water uses and

public interests should develop a Memorandum of Understanding which embodies the framework contained herein. This Environmental BMP Memorandum of Understanding would be signed and binding upon signatories in a manner which is parallel to the "Memorandum of Understanding Regarding Urban Water Conservation in California" and the "Memorandum of Understanding Regarding Efficient Water Use by Agricultural Water Suppliers."